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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,795	02/15/2001	Francis J. Bensur	9325-37	3418

23973 7590 08/21/2003

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EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N . 09/783,795	Applicant(s) BENSUR, FRANCIS J.	
	Examin r Sandra M. Nolan	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003 and 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-23 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions of 30 July 2003 (the RCE request and response numbered Paper Nos. 10 and 11, respectively) have been entered.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 30 June 2003 (Paper No. 8) was considered by the examiner.

Rejection Withdrawn

4. The 35 USC 112 rejection of claim 9 as set out in section 7 of the 28 March 2003 office action (Paper No. 7), is withdrawn in view of applicant's arguments on pages 3 and 4 of the 30 July response (Paper No. 11).

Rejections Maintained

5. The 35 USC 103 rejection of claims 1-5, 7, 11-17, 19-21 and 23, as unpatentable over Matsumoto et al (US 5,763,28) in view of Qian et al (US 6,407,155), as recited in

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section 6 of the 12 August 2002 office action (Paper No. 4), is maintained for reasons of record.

6. The 35 USC 103 rejection of claims 6, 8, 9, 18 and 22, as unpatentable over Matsumoto and Qian in view of Ohsima et al (US 4,903,841), as set out in section 7 of Paper No. 4, is maintained for reasons of record.

7. The 35 USC 103 rejection of claim 10 as unpatentable over Matsumoto, Qian, Kunz et al (US 5,387,449) and Sentendrey (US 5,486,408), as expressed in section 8 of Paper No. 4, is maintained for reasons of record.

New Rejection

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-23 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the Bensur declaration submitted as part of Paper No. 11, filed 30 July 2003. In that paper, applicant has stated that parameters such as the thickness of the urethane adhesive coating/layer (par. 11 of the declaration), the use of a two-part urethane (par. 12 of the declaration) and the mixing of the clay additive with the hydroxyl-containing adhesive component (par. 12 of the declaration) are key features of the invention, and this statement indicates that the invention is different from what is defined in the claim(s) because these features are not recited in the claims.

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10. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites a "copolymer" of diisocyanate and diol reactants. The polymers made by combining these two types of reactants are generally termed "urethane polymers" or "polyurethanes", not "copolymers". Note that the reaction product of ethylene glycol and terephthalic acid is called "polyethylene terephthalate" and is not considered a copolymer of its precursors.

Response to Arguments

11. Applicant's arguments filed in Paper No. 11 concerning the 35 USC 103 rejections have been fully considered but they are not persuasive. The arguments will be discussed in the order presented.

On page 2, applicant argues that the Bensur declaration submitted with Paper No. 11 shows that a skilled artisan would not consider the adhesive in a laminated product to be a layer because it is made and applied differently than the other layers.

However, adhesive (or tie) layers are recognized in the laminate art to be layers, regardless of the method by which they are incorporated into the laminates.

Furthermore, applicant's statements in the declaration concerning the thickness of his layers have been noted. But the claims contain no corresponding thickness limitations.

In the sentence bridging pages 2 and 3 of Paper No. 11, applicants argue that the "two-part type" adhesive and the dispersion of clay thereinto are also distinguishing features of applicant's claims.

However, the claims do not call for a two-part adhesive or the mixing of the clay particles therewith in any particular way. The "copolymer" of claim 10 is not a true copolymer. The reactants recited therein are conventionally kept apart until they are supposed to react.

On page 3 applicant argues that the examiner has used improper hindsight in rejecting the claims under 35 USC 103.

However, the use of appropriate hindsight is permitted. The formulation of prior art rejections demands that applicant's disclosure be considered before a search is made. Thus, some hindsight must be used. See MPEP 2145(x)(A).

The Bensur declaration has been considered, but is not deemed persuasive because the claims do not recite key features that are discussed in it.

Citation as of Interest

12. Bonk et al (US 6,013,340) is cited as teaching urethane "membranes" that improve adhesion and provide barrier properties (col. 21, lines 23-28).

Conclusion

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

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If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
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08 August 2003